

## UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS FILE ☒ WATER SANDS LOCATION INSPECTED SUB. REPORT/abd.

990914 LAD off 9-13-99

DATE FILED JUNE 22, 1998

LAND: FEE &amp; PATENTED

STATE LEASE NO.

PUBLIC LEASE NO.

U-010953

INDIAN

DRILLING APPROVED: JULY 9, 1998

SPUDDED IN:

COMPLETED:

PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED:

9-13-99 LAD

FIELD: NATURAL BUTTES

UNIT: NATURAL BUTTES

COUNTY: UINTAH

WELL NO. NBU 451-1E

API NO. 43-047-33142

LOCATION 1965 FSL FT. FROM (N) (S) LINE,

2132 FWL

FT. FROM (E) (W) LINE

NE SW

1/4 - 1/4 SEC.

1

TWP.

RGE.

SEC.

OPERATOR

TWP.

RGE.

SEC.

OPERATOR

10S

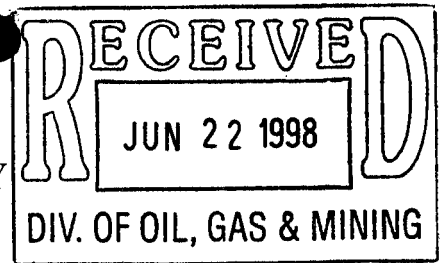
22E

1

ENRON OIL &amp; GAS CO.

**ENRON OIL & GAS COMPANY**

**P.O. Box 250  
Big Piney, WY 83113**



June 18, 1998

Utah Division of Oil, Gas, & Mining  
1594 West North Temple  
Box 145801  
Salt Lake City, UT 84114-5801

**RE: APPLICATION FOR PERMIT TO DRILL  
NATURAL BUTTES UNIT #451-1E  
NE/SW, SEC. 1, T10S, R22E, SLB & M  
UINTAH COUNTY, UTAH  
LEASE NO. U-010953  
FEDERAL LAND-BLM**

Enclosed please find a copy of the Application for Permit to Drill and associated attachments for the referenced well.

Please address further communication regarding this matter (including approval) to:

Ed Trotter  
P.O. Box 1910  
Vernal, UT 84078  
Phone # (801) 789-4120  
Fax # (801) 789-1420

Sincerely,

A handwritten signature in cursive script, appearing to read "Ed Trotter".

Ed Trotter  
Agent

**Enron Oil & Gas Company**

Attachments

/EHT/dmt

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

ENRON OIL &amp; GAS COMPANY

## 3. ADDRESS AND TELEPHONE NO.

P.O. BOX 1815, VERNAL, UTAH 84078

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

At surface

1965' FSL &amp; 2132' FWL NE/SW

At proposed prod. zone

CONFIDENTIAL

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

24.05 MILES SOUTHEAST OF OURAY, UTAH

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

1965'

## 16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

80

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

7130'

## 20. ROTARY OR CABLE TOOLS

ROTARY

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5092' GRADED GROUND

## 22. APPROX. DATE WORK WILL START\*

AUGUST 1998

## 23.

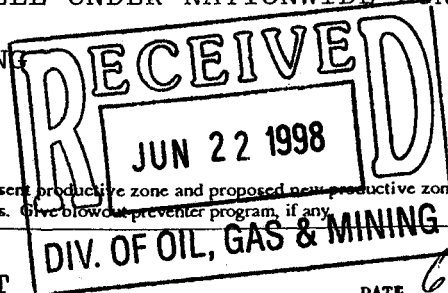
## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	24#	200-220'	100-150 SX CLASS "G" + 2%
OR 12 1/4"	9 5/8"	32.30#	200-220'	CaCl <sub>2</sub> + 1/4 #/SX CELLOFLAKE.
7 7/8"	4 1/2"	10.50#	7130'	50/50 POZMIX + 2% GEL + 10% SALT TO 400' ABOVE ALL ZONES OF INTEREST (+10% EXCESS). LIGHT CEMENT (11 PPG) + LCM TO 200' ABOVE OIL SHALE OR FRESH WATER INTERVALS (+ 5% EXCESS).

## SEE ATTACHMENTS FOR:

8 POINT PLAN  
BOP SCHEMATIC  
SURFACE USE AND OPERATING PLAN  
LOCATION PLAT  
LOCATION LAYOUT  
TOPOGRAPHIC MAPS "A", "B", AND "C"  
GAS SALES PIPELINE--MAP "D"  
FACILITY DIAGRAM,ENRON OIL & GAS COMPANY WILL BE THE  
DESIGNATED OPERATOR OF THE SUBJECT  
WELL UNDER NATIONWIDE BOND #81307603

pc: UTAH DIVISION OF OIL, GAS, AND MINING

637640.8  
4436135.2

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

TITLE AGENT

DATE

6-18-1998

(This space for Federal or State office use)

PERMIT NO.

43-647-33142

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY: **Federal Approval of this Action is Necessary**BRADLEY G. HILL  
RECLAMATION SPECIALIST III

APPROVED BY

TITLE

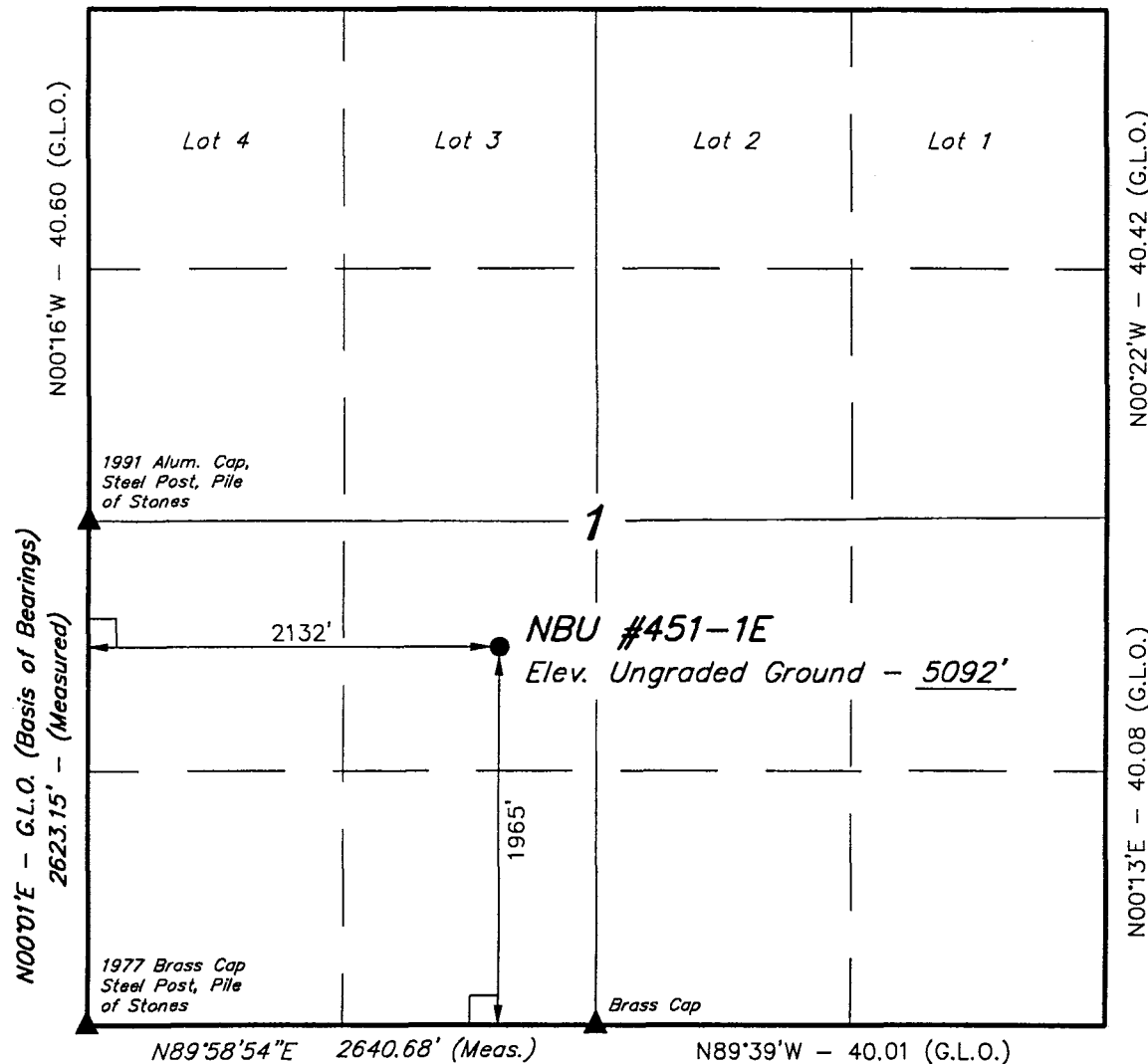
DATE

7/9/98

\*See Instructions On Reverse Side

*T10S, R22E, S.L.B.&M.*

WEST (G.L.O.)



**LEGEND:**

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

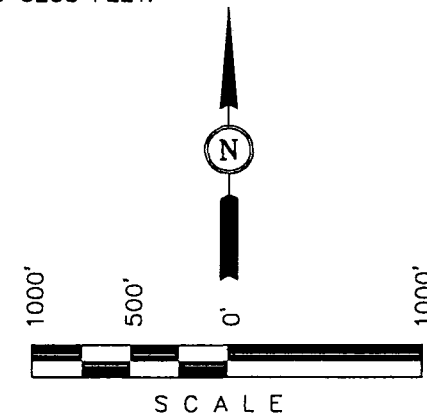
▲ = SECTION CORNERS LOCATED.

**ENRON OIL & GAS CO.**

Well location, NBU #451-1E, located as shown in the NE 1/4 SW 1/4 of Section 1, T10S, R22E, S.L.B.&M. Uintah County, Utah.

**BASIS OF ELEVATION**

TWO WATER TRIANGULATION STATION IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME, OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert L. Kay  
No. 161319  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(801) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 11-21-97	DATE DRAWN: 11-25-97
PARTY B.B. D.R. D.COX	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE ENRON OIL & GAS CO.	

## EIGHT POINT PLAN

### NATURAL BUTTES UNIT #451-1E NE/SW, SEC. 1, T10S R22E, SLB & M UINTAH COUNTY, UTAH

#### 1. & 2. ESTIMATED TOPS & ANTICIPATED OIL, GAS & WATER ZONES:

FORMATION	DEPTH	TYPE ZONES	MAXIMUM PRESSURE
Green River	1539		
Oil Shale	1539		
"H" Marker	2914		
"J" Marker	3554		
Base "M" Marker	3984		
Wasatch	4334		
Peters Point	4334	GAS	2000
Chapita Wells	4864	GAS	2000
Buck Canyon	5424	GAS	2000
Island	6347		
EST. TD	7130	Anticipated BHP 3100 PSI	

#### 3. PRESSURE CONTROL EQUIPMENT :

BOP Schematic Diagram attached.

#### 4. CASING PROGRAM :

							<u>MINIMUM SAFETY FACTOR</u>		
<u>HOLE SIZE</u>	<u>INTERVAL</u>	<u>LENGTH</u>	<u>SIZE</u>	<u>WEIGHT</u>	<u>GRADE</u>	<u>THREAD</u>	<u>COLLAPSE</u>	<u>BURST</u>	<u>TENSILE</u>
11"	0' - 220'	200'-220'	8 5/8	24#	J-55	ST&C	1370 PSI	2950 PSI	263,000#
or									
12 1/4"	0' - 220'	200'-220'	9 5/8	32.3#	H-40	ST&C	1370 PSI	2270 PSI	254,000#
7 7/8"	0' - 7130'	7130'	4 1/2	10.5#	J-55	ST&C	4010 PSI	4790 PSI	146,000#

All casing will be new or inspected.

#### 5. MUD PROGRAM

<u>INTERVAL</u>	<u>MUD TYPE</u>
0' - 220'	Air
240' - 4000'	Air/Mist & Aerated Water
4000' - TD	Air/3% KCL water or KCL substitute
TD	Gel/polyacrylamide polymer w/5-10% LCM

Lost circulation probable from 1500' to 3000' +/-.

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise.

## EIGHT POINT PLAN

### NATURAL BUTTES UNIT #451-1E NE/SW, SEC. 1, T10S R22E, SLB & M UINTAH COUNTY, UTAH

#### 6. VARIANCE REQUESTS:

- A. Enron requests a variance to regulations requiring a straight run blooie line (Where possible, a straight run blooie line will be used).
- B. Enron requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line. (Not required on aerated water system).
- C. Enron requests a variance to regulations requiring the blooie line to be 100' in length. To reduce location excavation, the blooie line will be 75' in length.

#### 7. EVALUATION PROGRAM:

Logs:	SCHLUMBERGER WIRELINE	From base of surface casing to TD.
	Platform Express with Microlog & SP	FDC/CNL/Cal/PE: 2700' to TD
Cores:	None Programmed	
DST':	None Programmed	

Completion: To be submitted at a later date.

Note: If hole conditions prevent the running of open hole logs, a cased hole Dipole Sonic/Neutron/GR will be run in lieu of open hole logs.

#### 8. ABNORMAL CONDITIONS:

None anticipated.

#### 9. STANDARD REQUIRED EQUIPMENT:

- A. Choke Manifold
- B. Kelly Cock
- C. Stabbing Valve
- D. Visual Mud Monitoring

#### 10. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances (as defined in 40 CFR 355), in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

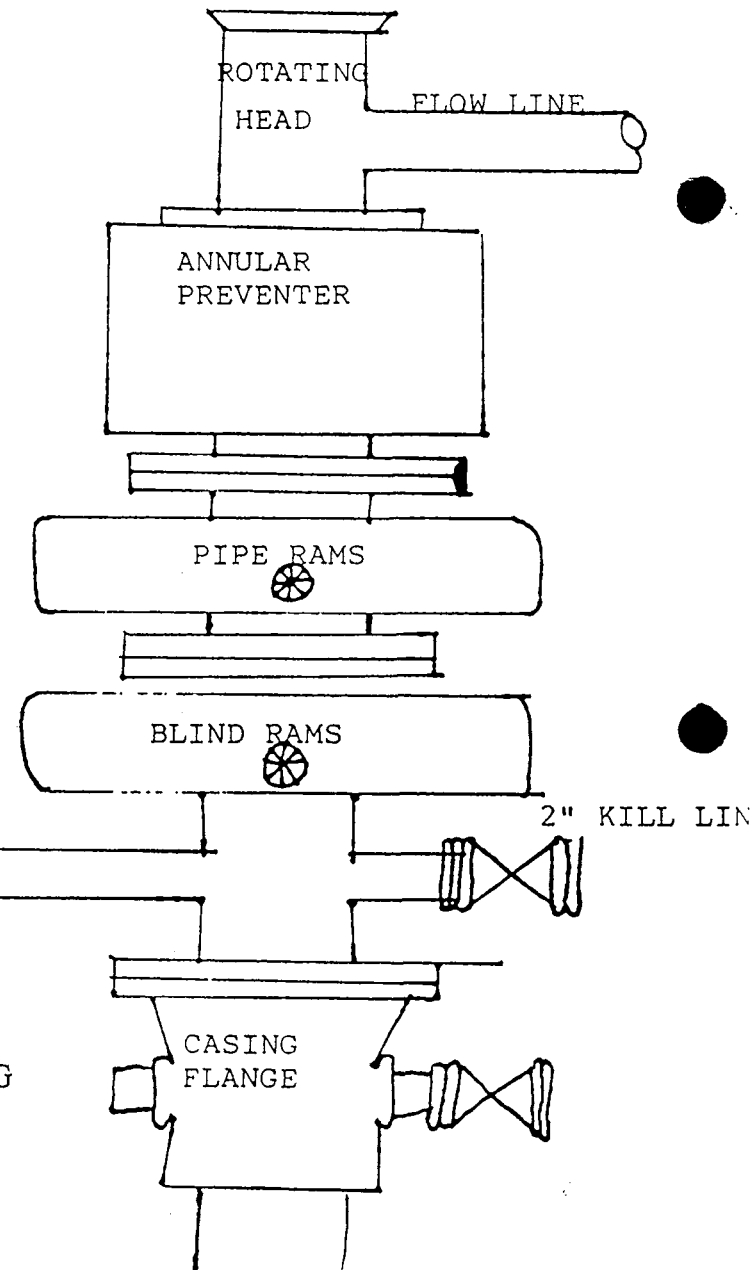
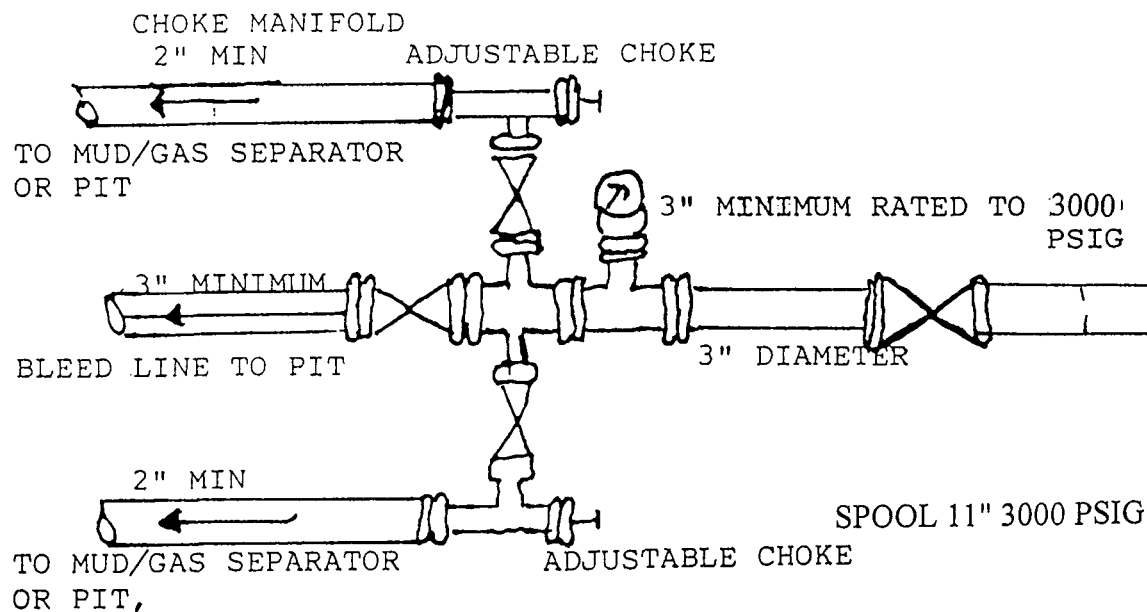
(Attachment: BOP Schematic Diagram)

## 3000 PSIG DIAGRAM

ANNULAR PREVENTOR AND BOTH RAMS ARE 3000 RATED.  
CASING FLANGE IS 11" 3000 PSIG RATED.  
BOPE 11" 3000 PSIG

### TESTING PROCEDURE:

1. BOPE 's will be tested with a professional tester to conform to Onshore Order #2 with retest every 14 days.
2. Blind & Pipe rams will be tested to rated working pressure, 3000 psig
3. Annular preventor will be tested to 50% of working pressure, 1500 psig
4. Casing will be tested to 0.22 psi/ft. or 1500 psig. Not to exceed 70% of burst strength, whichever is greater.
5. All lines subject to well pressure will be pressure tested to the same pressure as blind & pipe rams.
6. All BOPE specifications and configurations will meet Onshore Order #2 requirements for 3000 psig BOPE specifications.



CONDITIONS OF APPROVAL  
FOR THE SURFACE USE PROGRAM OF THE  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Enron Oil & Gas Company  
Well Name & Number: Natural Buttes Unit #451-1E  
Lease Number: U-010953  
Location: 1965' FSL & 2132' FWL, NE/SW, Sec. 1, T10S, R22E, SLB & M  
Surface Ownership: Federal

NOTIFICATION REQUIREMENTS

Location Construction - forty-eight (48) hours prior to construction of location and access roads.

Location Completion - prior to moving on the drilling rig.

Spud Notice - at least twenty-four (24) hours prior to spudding the well.

Casing String and  
Cementing - twenty-four (24) hours prior to running casing and cementing all casing strings.

BOP and related  
Equipment Tests - twenty-four (24) hours prior to running casing and tests.

First Production  
Notice - within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice To Drill and Surface Use Program.



## THIRTEEN POINT SURFACE USE PROGRAM

### 1. EXISTING ROADS

- A. See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing roads.
- B. The proposed well site is located approximately 24.05 miles southeast of ~~Ouray~~, Utah - See attached TOPO Map "A".
- C. Refer to attached Topographic Map "A" showing labeled access route to location.
- D. Existing roads will be maintained and repaired as necessary. No off lease Right-of-Way will be required.

### 2. PLANNED ACCESS ROAD

- A. The access road will be approximately .15 mile in length.  
See attached TOPO Map "B"
- B. The access road has a 30 foot ROW w/18 foot running surface.
- C. Maximum grade on access road will be 8%
- D. No turnouts will be required.
- E. Road drainage crossings shall be of the typical dry creek drainage crossing type.
- F. No culverts, bridges or major cuts & fills will be required.
- G. The access road will be dirt surface.
- H. No gates, cattleguards or fences will be required or encountered.

New or reconstructed roads will be centerline - flagged at time of location staking.

The road shall be upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Upgrading shall include ditching, drainage, graveling, crowning, and capping the roadbed as necessary to provide a well-constructed safe road.

Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot Right-of- Way will not be allowed.

Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossings nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by run off water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.

As operator, Enron Oil & Gas Company shall be responsible for all maintenance on cattleguards, or gates associated with this oil and/or gas operation.

3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS OF PROPOSED WELL LOCATION

- A. Water wells - None
  - B. Abandoned wells - 2\*
  - C. Temporarily abandoned wells - None.
  - D. Disposal wells - None.
  - E. Drilling wells - None.
  - F. Producing wells - 10\*
  - G. Shut in wells - None
  - H. Injection wells - None
- (\*See attached TOPO map "C" for location)

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. ON WELL PAD

- 1. Tank batteries - None
- 2. Production facilities will be set on location if the well is successfully completed for production. Facilities will consist of well head valves, combination separator-dehy unit with meter run, 300 Bbl vertical or 200 Bbl low profile condensate tank, and attaching piping. See attached facility diagram.
- 3. Oil gathering lines - None

4. Gas gathering lines- A 3" nominal gathering line will be buried from dehy to the edge of location.
5. Injection lines - None
6. Disposal lines - None
7. Surface pits - None

**B. OFF WELL PAD**

1. Proposed location of attendant off pad flowlines shall be flagged prior to archaeological clearance.
2. A 3" nominal steel above ground natural gas pipeline will be laid approximately 609' from proposed location to a point in the NW/SE of Section 1, T10S, R22E, where it will tie into CIGE's existing line. Proposed pipeline crosses Federal lands within the Natural Buttes Unit, thus a Right-of-Way grant will not be required.
3. Proposed pipeline will be a 3" nominal steel, welded line laid on the surface.
4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.  
If storage facilities/tank batteries are constructed on this lease, the facility/battery or the well pad shall be surrounded by a containment dike of sufficient capacity to contain, at a minimum, the entire contents of the largest tank within the facility/battery.

The production facilities will be placed on the Southeast side of the location.

**5. LOCATION & TYPE OF WATER SUPPLY**

- A. Water supply will be from Ouray Brine Plant at Ouray, Utah, and/or Target Trucking Inc.'s water source in the SW/SW Sec. 35, T9S, R22E Uintah County, Utah (State water right #49-1501).
- B. Water will be hauled by an approved Enron Oil & Gas Co. contractor.
- C. No water well will be drilled on lease.

## 6. SOURCE OF CONSTRUCTION MATERIAL

- A. All construction material for this location and access road will be of native borrow and soil accumulated during the construction of location.
- B. All construction material will come from Federal Land.
- C. No mineral materials will be required.

## 7. METHODS OF HANDLING WASTE DISPOSAL

### A. METHODS AND LOCATION

- 1. Cuttings will be confined in the reserve pit.
- 2. A portable toilet will be provided for human waste during the drilling and completion of the well. Disposal will be at the Vernal sewage disposal plant.
- 3. Burning will not be allowed. Trash and other waste material will be contained in a wire mesh cage and disposed of at an approved waste disposal facility.
- 4. Produced waste water will be confined to a lined pit or storage tank for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, together with the required water analysis, will be submitted for the AO's approval.
- 5. All chemicals will be disposed of at an authorized disposal site. Drip pans and absorbent pads will be used on drilling rig to avoid leakage of oil to pit.

- B. Water from drilling fluids and recovered during testing operations will be disposed of by either evaporating in reserve pit or be removed and disposed of at an authorized disposal site. Introduction of well bore hydrocarbons to reserve pit will be avoided by flaring them off in flare pit at time of recovery.

Burning of trash will not be allowed. All trash must be contained in a trash cage and hauled away to an approved disposal site at the completion of the drilling activities.

On BLM administered land:

The reserve pit will be constructed so as not to leak, break, or allow discharge.

**The reserve pit shall be lined.**

After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the 90 day period, in accordance with Onshore Order No.7, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.

8. ANCILLARY FACILITIES

- A. No airstrips or camps are planned for this well.

9. WELL SITE LAYOUT

- A. Refer to attached well site plat for related topography cuts and fills & cross sections.
- B. Refer to attached well site plat for rig layout and soil material stockpile location as approved on On-site.
- C. Refer to attached well site plat for rig orientation parking areas, and access road.
- D. The approved seed mixture for this location will be described in the conditions of approval

The reserve pit will be located on the Northwest side of the location.

The flare pit will be located downwind of the prevailing wind direction on the Northwest side of the location, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.

The stockpiled pit topsoil will be stored separate from the location topsoil

West of Corner #3.

The stockpiled location topsoil will be stored on the Southeast side and will be seeded with the approved seed mixture for this location. Upon completion of construction, the stockpiled topsoil from the location will be seeded and then walked down with a Dozer.

Access to the well pad will be from the Southwest.

~~N/A~~ Diversion ditch(es) shall be constructed on the \_\_\_\_\_ side of the location (above/below) the cut slope, draining to the \_\_\_\_\_

N/A Soil compacted earthen berm(s) shall be placed on the \_\_\_\_\_ side(s) of the location between the \_\_\_\_\_

N/A The drainage(s) shall be diverted around the sides of the well pad location.

N/A The reserve pit and/or pad locations shall be constructed long and narrow for topographic reasons \_\_\_\_\_

X Corners No. 2 & 6 will be rounded off to minimize excavation.

## FENCING REQUIREMENTS

All pits will be fenced according to the following minimum standards:

- A. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
- B. The net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16'.
- E. All wire shall be stretched by using a stretching device before it is attached to the corner posts.

The reserve pit fencing will be on the three sides during drilling operations and on the fourth side when the rig moves off the location.

Pits will be fenced and maintained until clean-up.

Each existing fence to be crossed by the access road shall be braced and tied off before cutting so as to prevent slacking of the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM or SMA specifications. A cattleguard with an adjacent 16 foot gate shall be installed in any fence where a road is to be regularly travelled. If the well is a producer, the cattleguards (shall/ shall not) be permanently mounted on concrete bases. Prior to a new road, crossing any fence located on federal land, or any fence between federal land and private land, the operator will contact the BLM, who will in turn contact the grazing permittee or owner of said fence and offer him/her the opportunity to be present when the fence is cut in order to satisfy himself/herself that the fence is adequately braced and tied off.

#### 10. PLANS FOR RESTORATION OF SURFACE

##### A. PRODUCING LOCATION

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. **Once the reserve pit is dry, it should be filled, recontoured, topsoil spread, and seeded by broadcasting the seed mix identified in the APD, then walking the seed in with a dozer.**

**B. DRY HOLE/ABANDONED LOCATION**

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and the BLM will attach the appropriate surface rehabilitation conditions of approval.

**11. SURFACE OWNERSHIP**

Access road:     Federal    

Location:     Federal    

**12. OTHER INFORMATION**

A. Enron Oil & Gas Company will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of historic Places;

-the mitigation measures the operator will likely have to undertake before the site can be used.

-a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wished, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for mitigation costs.



The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

Additional Surface Stipulations

N/A No construction or drilling activities shall be conducted between \_\_\_\_\_ and \_\_\_\_\_ because of \_\_\_\_\_

N/A No surface occupancy will be allowed within 1,000 feet of any sage grouse strutting ground.

N/A No construction or exploration activities are permitted within 1.5 mile radius of sage grouse strutting grounds from April 1 to June 30.

N/A There shall be no surface disturbance within 600 feet of live water (includes stock tanks, springs, and guzzlers).

N/A No cottonwood trees will be removed or damaged.

N/A Pond will be constructed according to BLM specifications approximately 400 ft. north of the location, as flagged on onsite.

LESSEE'S OR OPERATOR'S REPRESENTATIVES AND CERTIFICATION

<u>OPERATIONS</u>		<u>PERMITTING</u>
Enron Oil & Gas Company	Enron Oil & Gas Company	Ed Trotter
P.O. Box 250	P.O. Box 1815	P.O. Box 1910
Big Piney, WY 83113	Vernal, UT 84078	Vernal, UT 84078
Jim Schaefer	George McBride	Telephone (801) 789-4120
Telephone (307) 276-3331	Telephone (801) 789-0790	Fax # (801) 789-1420

All lease/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approval plan of operations, and any applicable Notice to Lessees. Enron Oil & Gas Company is fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

A copy of the approved APD and ROW grant, if applicable, shall be on location during construction of the location and drilling activities.

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the Plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Enron Oil & Gas Company and its contractors and sub-contractors in conformity with this Plan and the terms and conditions under which it is approved.

6-18-1998

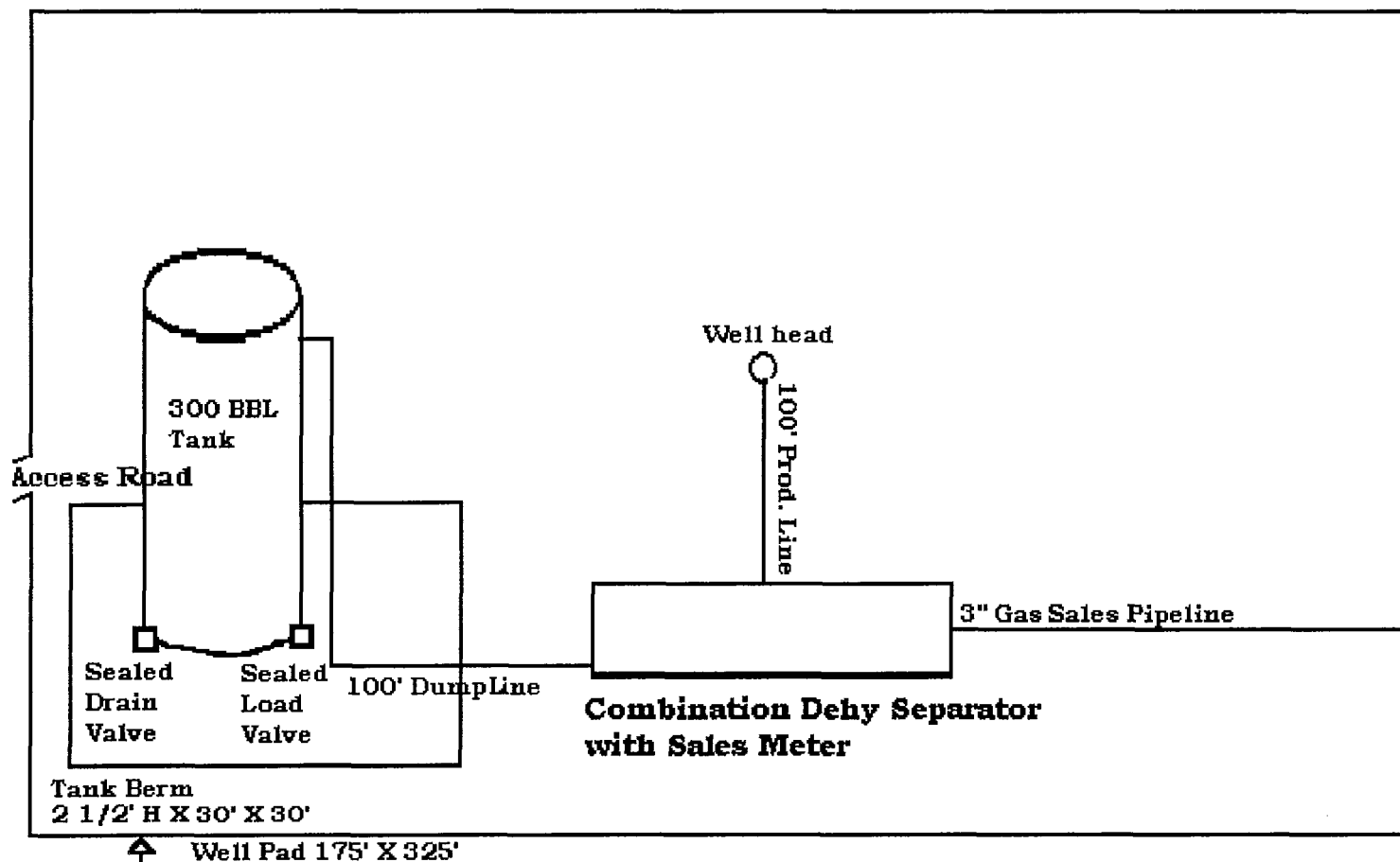
Date



Ed Trotter-Agent-  
Enron Oil & Gas Company

**SITE FACILITY DIAGRAM**  
**NATURAL BUTTES UNIT #451-1E**  
**SEC. 1, T10S, R22E NE/4SW/4**  
**UINTAH COUNTY, UTAH**  
**FEDERAL LEASE NO. U-010953**

(Site Security Plan is on file at Enron's Vernal Office)



# ENRON OIL & GAS CO.

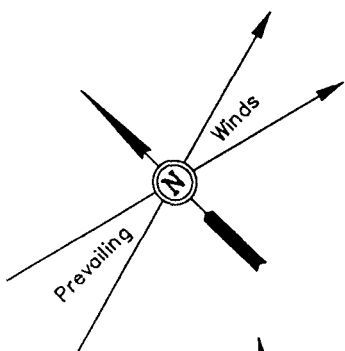
## LOCATION LAYOUT FOR

NBU #451-1E

SECTION 1, T10S, R22E, S.L.B.&M.

1965' FSL 2132' FWL

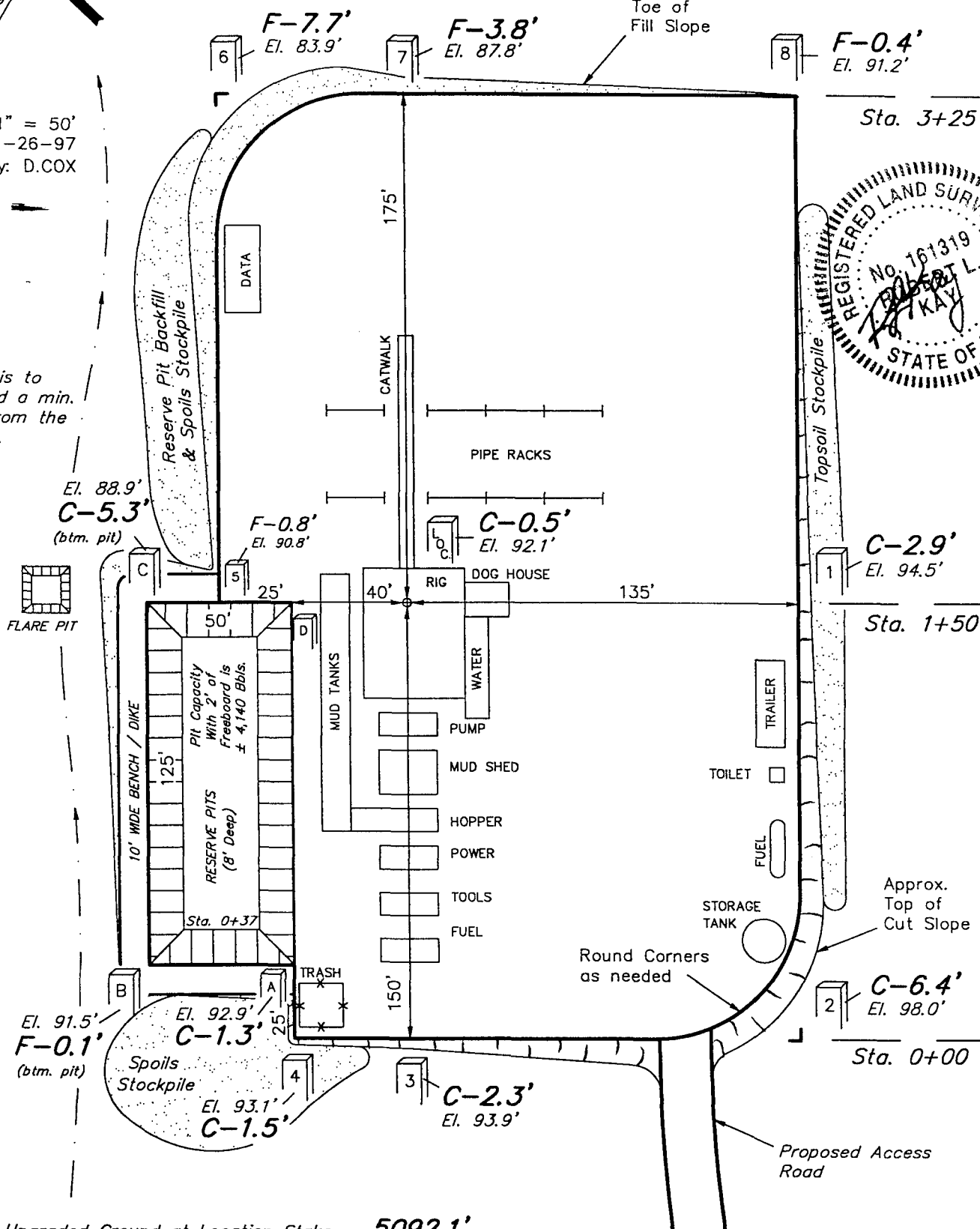
Approx.  
Toe of  
Fill Slope



SCALE: 1" = 50'  
DATE: 11-26-97  
Drawn By: D.COX

### NOTE:

Flare Pit is to be located a min. of 100' from the Well Head.



Elev. Ungraded Ground at Location Stake = 5092.1'

Elev. Graded Ground at Location Stake = 5091.6'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (801) 789-1017

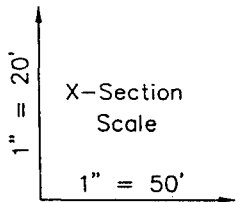
# ENRON OIL & GAS CO.

## TYPICAL CROSS SECTIONS FOR

NBU #451-1E

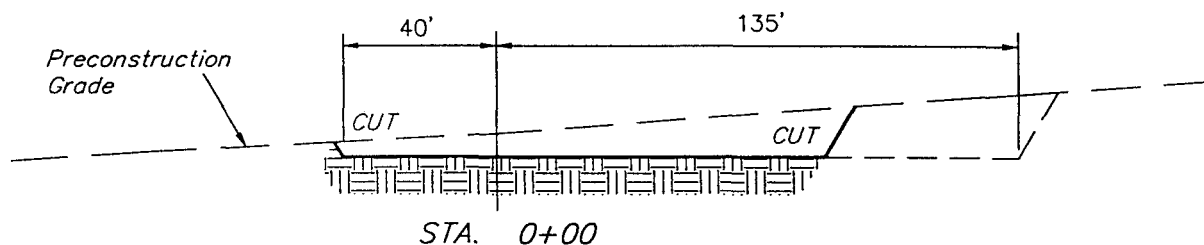
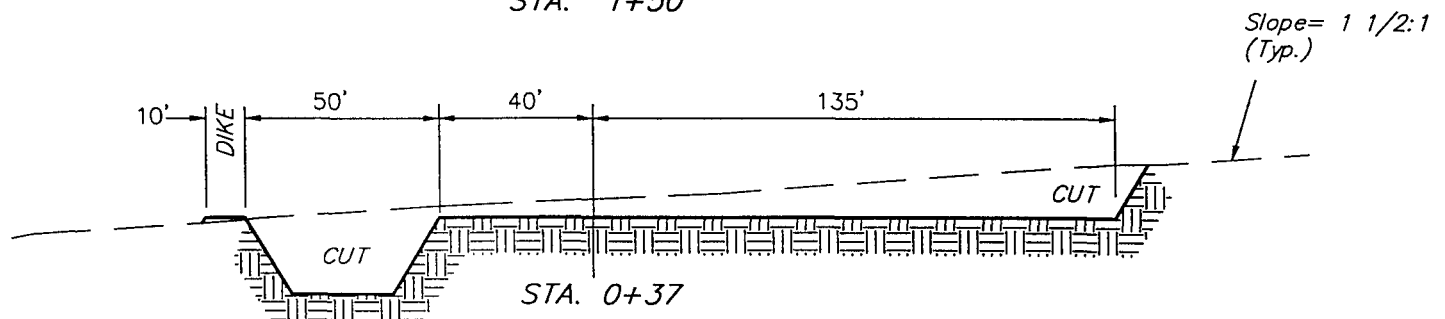
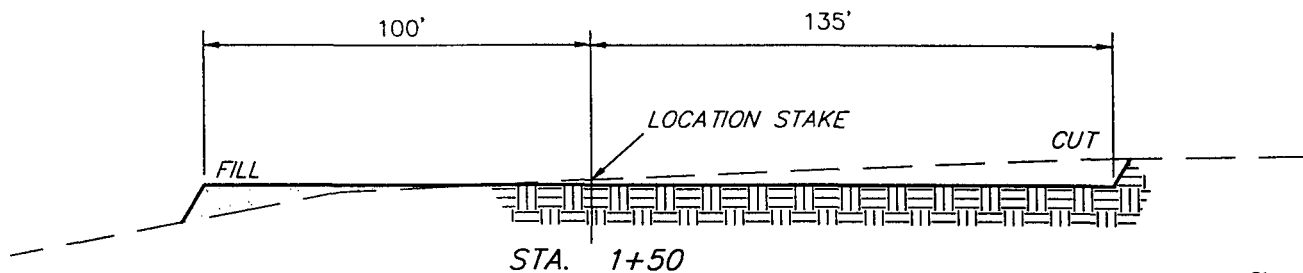
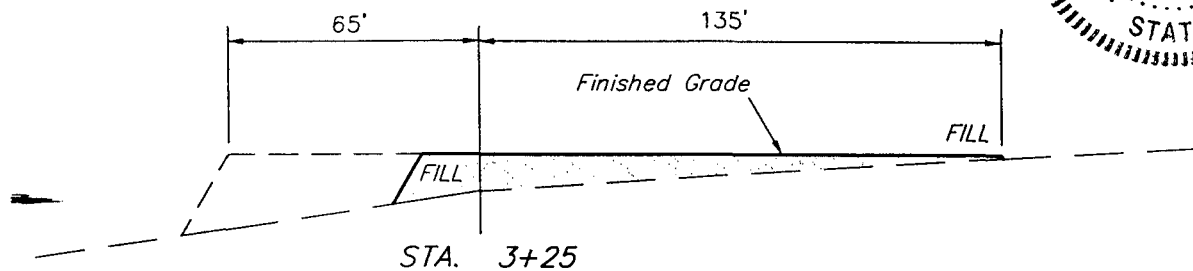
SECTION 1, T10S, R22E, S.L.B.&M.

1965' FSL 2132' FWL



DATE: 11-26-97

Drawn By: D.COX



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,250 Cu. Yds.

Remaining Location = 3,490 Cu. Yds.

TOTAL CUT = 4,740 CU.YDS.

FILL = 2,700 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION

= 1,900 Cu. Yds.

Topsoil & Pit Backfill (1/2 Pit Vol.)

= 1,900 Cu. Yds.

EXCESS UNBALANCE (After Rehabilitation)

= 0 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

**LEGEND:**

**PROPOSED LOCATION**

# ENRON OIL & GAS COMPANY

**NBU #451-1E**

**SECTION 1, T10S, R22E, S.L.B.&M.**

1965' FSL 2132' FWL

# UEIS

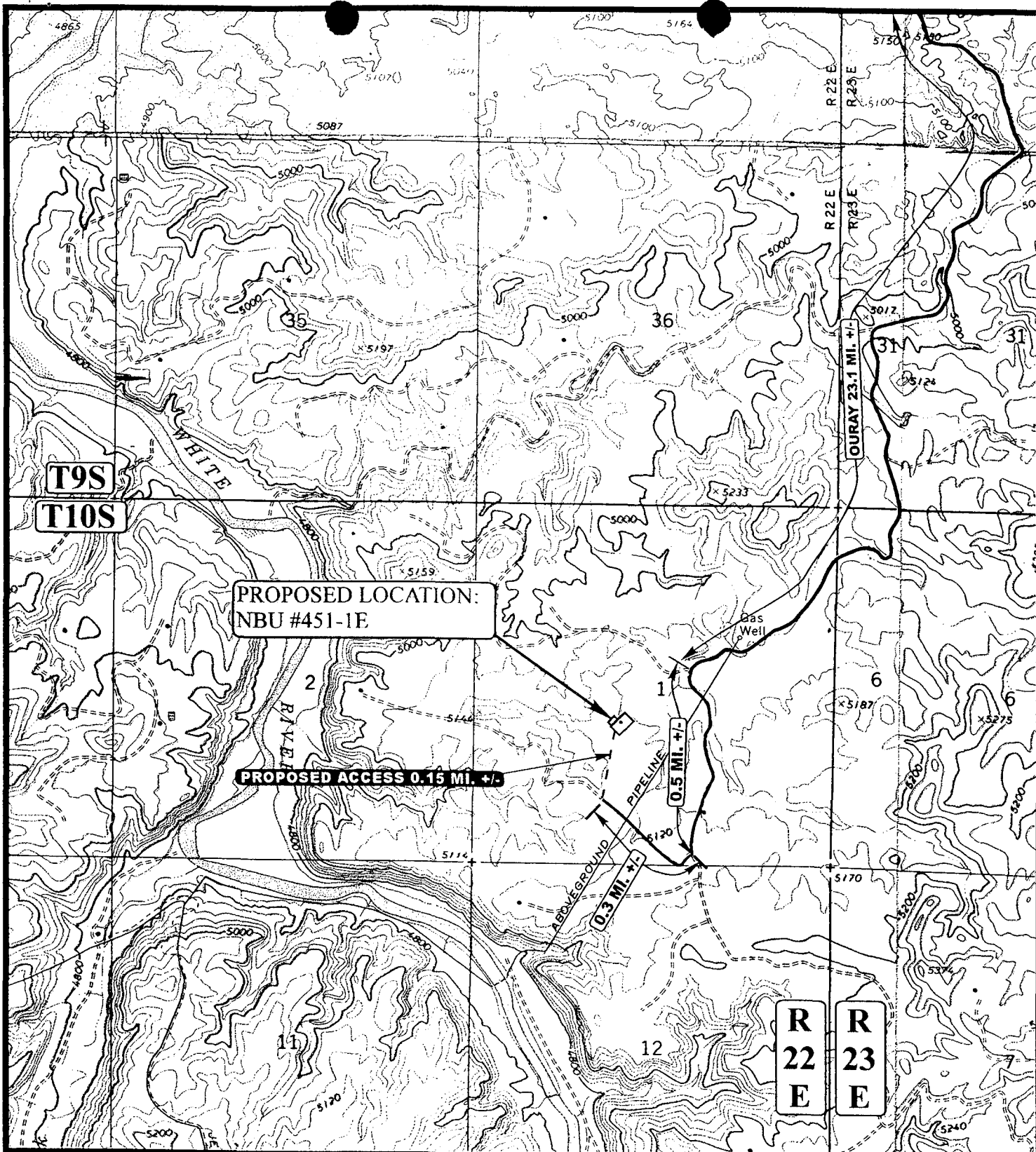
**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
**(435) 789-1017 \* FAX (435) 789-1813**

**TOPOGRAPHIC  
MAP**

<b>11</b>	<b>24</b>	<b>97</b>
MONTH	DAY	YEAR

SCALE: 1 : 100,000	DRAWN BY: C.G.	REVISED: 00-00-00
--------------------	----------------	-------------------

**A**  
**TOPO**



# **LEGEND:**

----- PROPOSED ACCESS ROAD  
 \_\_\_\_\_ EXISTING ROAD



## **ENRON OIL & GAS COMPANY**

NBU #451-1E

SECTION 1, T10S, R22E, S.L.B.&M.

1965' FSL 2132' FWL



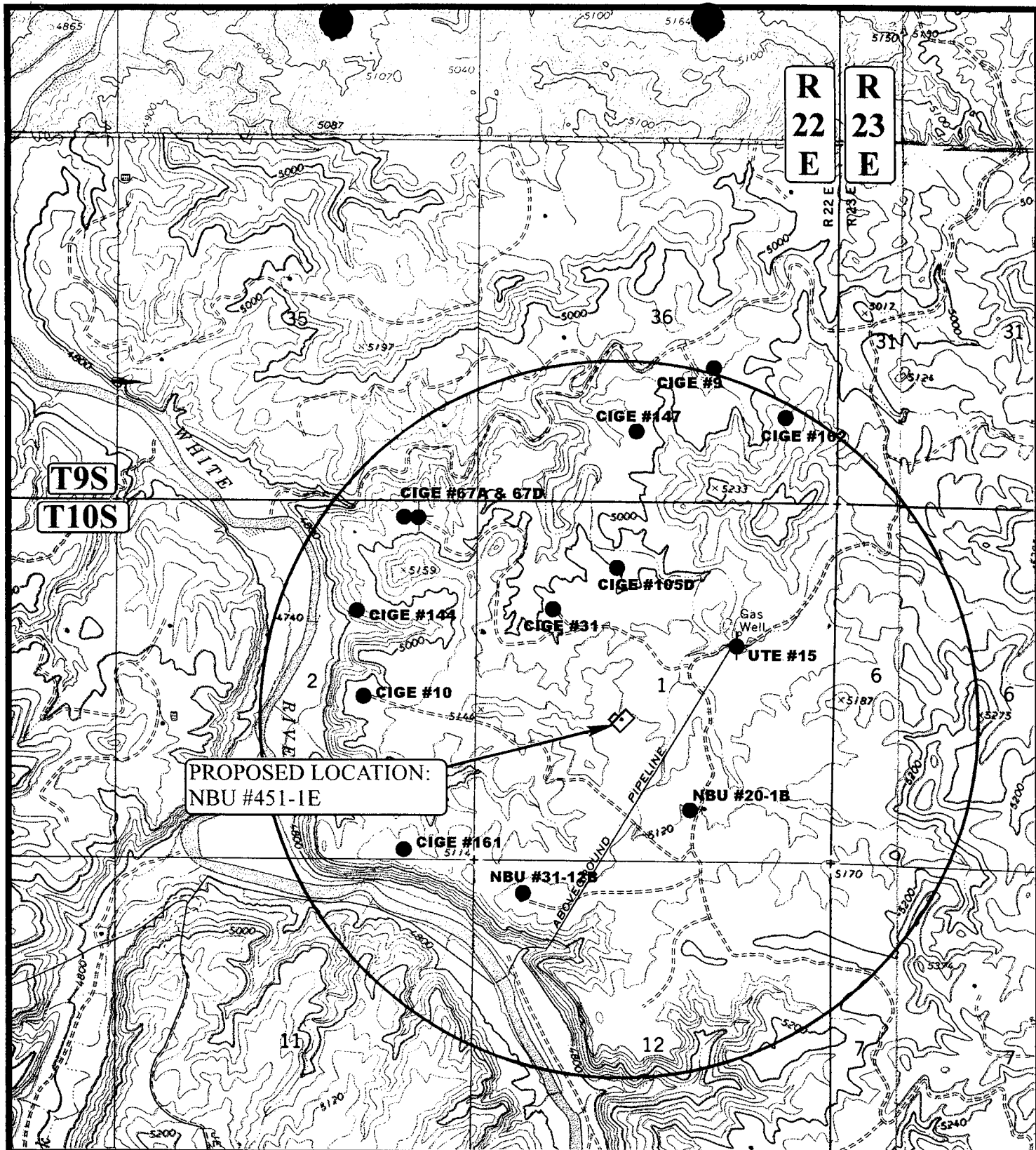
**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
 MAP**

**11 24 97**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.G. REVISED: 00-00-00

**B  
 TOPO**



# **LEGEND:**

- |                   |                         |
|-------------------|-------------------------|
| ⊗ DISPOSAL WELLS  | ⊗ WATER WELLS           |
| ● PRODUCING WELLS | ⊗ ABANDONED WELLS       |
| ⊗ SHUT IN WELLS   | ● TEMPORARILY ABANDONED |

## **ENRON OIL & GAS COMPANY**

**NBU #451-1E**  
**SECTION 1, T10S, R22E, S.L.B.&M.**  
**1965' FSL 2132' FWL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



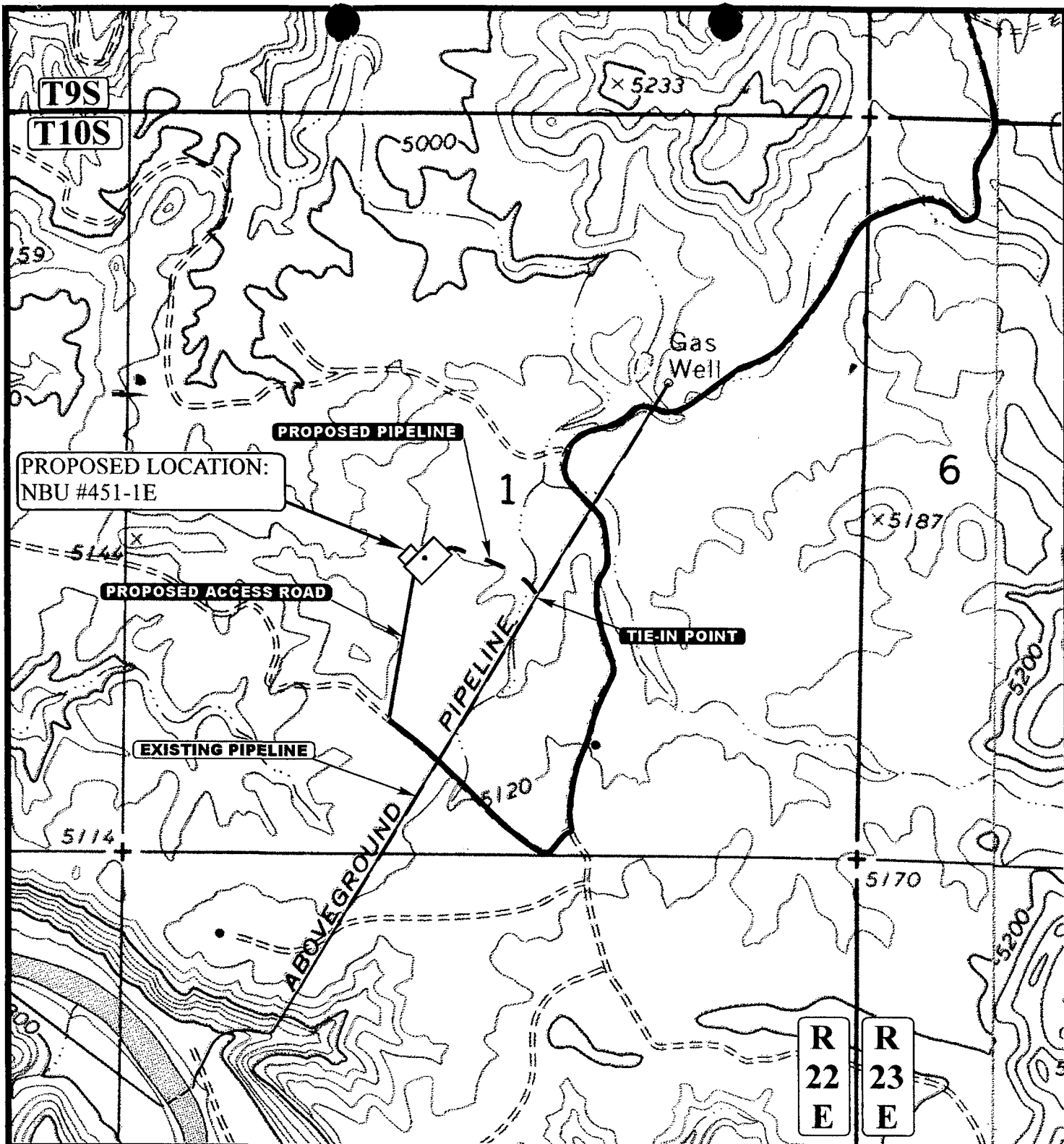
**TOPOGRAPHIC**  
**MAP**

**11 24 97**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.G. REVISED: 00-00-00







APPROXIMATE TOTAL PIPELINE DISTANCE = 609' +/-

**LEGEND:**

- — — — — EXISTING PIPELINE
- - - - - PROPOSED PIPELINE
- — — — — PROPOSED ACCESS



**ENRON OIL & GAS COMPANY**

NBU #451-1E

SECTION 1, T10S, R22E, S.L.B.&M.

1965' FSL 2132' FWL



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

**11 24 97**  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: C.G. REVISED: 00-00-00

**D  
TOPO**

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 06/22/98

API NO. ASSIGNED: 43-047-33142

WELL NAME: NBU 451-~~1E~~ (451-1E)  
OPERATOR: ENRON OIL & GAS COMPANY (N0401)  
CONTACT: Ed Trotter (435) 789-4120

PROPOSED LOCATION:

NESW 01 - T10S - R22E  
SURFACE: 1965-FSL-2132-FWL  
BOTTOM: 1965-FSL-2132-FWL  
UINTAH COUNTY  
NATURAL BUTTES FIELD (630)

LEASE TYPE: FED  
LEASE NUMBER: U-010953  
SURFACE OWNER: Federal

INSPECT LOCATION BY: / /

TECH REVIEW	Initials	Date
Engineering	<i>RSK</i>	<i>7-8-98</i>
Geology		
Surface		

PROPOSED FORMATION: WSTC

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Federal ☒ State ☐ Fee ☐  
(No. #81307603)  
☒ Potash (Y/N)  
☒ Oil Shale (Y/N) \*190-5(B)  
☒ Water Permit  
(No. Duray Brine Plant # 49-1501)  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_)  
N/A St/Fee Surf Agreement (Y/N)

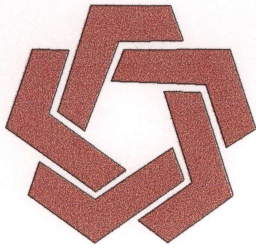
LOCATION AND SITING:

☒ R649-2-3. Unit Natural Buttes  
☐ R649-3-2. General  
☐ R649-3-3. Exception  
☐ Drilling Unit  
Board Cause No: \_\_\_\_\_  
Date: \_\_\_\_\_

COMMENTS: \* Unit operator "Coastal" desig. of agent aprv. by BLM required. (Rec'd 7-1-98)

STIPULATIONS: ① Federal Approval

② In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rule R649-3-31 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the 4½" casing is cemented over the entire oil shale section as defined by Rule R649-3-31 (approximately 3,230' to 3,336' G.L.).



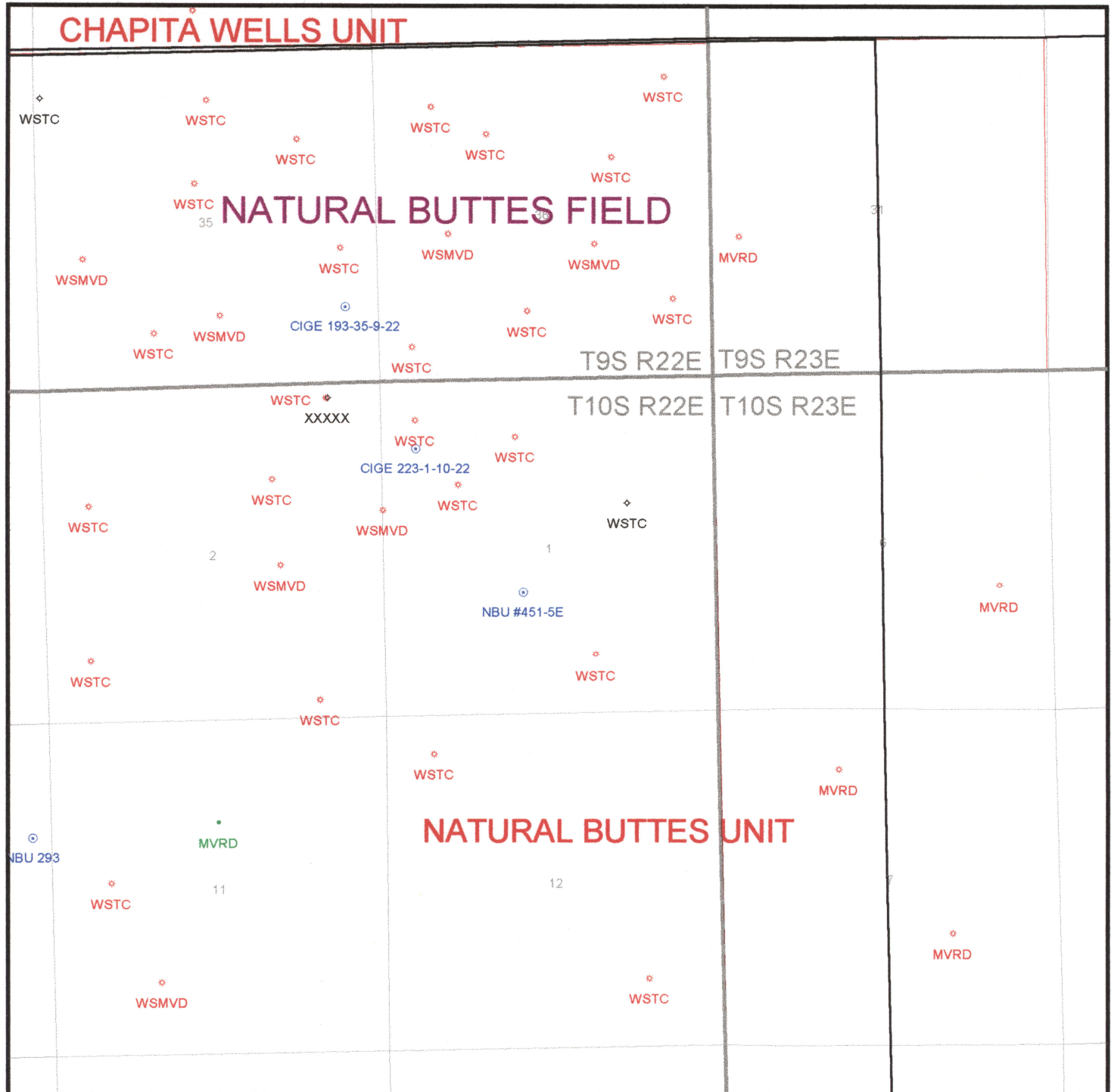
DIVISION OF OIL, GAS & MINING

OPERATOR: ENRON OI & GAS CO. (N0401)

FIELD: NATURAL BUTTES (630)

SEC. 1, TWP 10S, RNG 22E

COUNTY: UINTAH UAC: R649-2-3 NATRUAL BUTTES UNIT



DATE PREPARED:  
24-JUNE-1998

JUL-01-1998 09:12

ENRON OIL &amp; GAS COMPANY

323 572 5412 P.22/24

DESIGNATION OF AGENT

Robert A. Henricks  
Chief, Branch of Fluid Minerals

The undersigned is, on the records of the Bureau of Land Management, Unit Operator under the Natural Buttes Unit Agreement, Uintah County, Utah, No. 14-08-00018900 approved January 5, 1988, and hereby designates:

NAME: Enron Oil & Gas Company

ADDRESS: P.O. Box 1815  
Vernal, Utah 84078

as its agent, with full authority to act in its behalf in complying with the terms of the unit agreement and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to drilling, testing, and completing the unit wells listed on the attached Exhibit "A" which are located in Uintah County, Utah.

This designation of agent does not relieve the Unit Operator of responsibility for compliance with the terms of the unit agreement. It is also understood that this designation of agent does not constitute an assignment of any interest under the unit agreement or any lease committed thereto.

The designated agent will be responsible for compliance with the Oil and Gas Operating Regulations as they relate to the drilling, testing, and completing of each of the subject wells. In accordance with 3104.2, bonding shall be provided by Enron Oil & Gas Company, Bond No. 81307603.

This designation of agent is deemed to be temporary and in no manner a permanent arrangement.

This designation is given only to enable the agent herein designated to drill the above specified unit wells. Unless sooner terminated, this designation shall terminate as to each well when there is filed in the appropriate district office of the Bureau of Land Management a completed file of all required Federal reports pertaining to that well. At which time the Unit Operator shall assume all liability of that well and bonding shall be provided by the Unit Operator or as otherwise arranged by the unit agreement. It is also understood that this designation of agent is limited to field operations and does not cover administrative actions requiring specific authorization of the Unit Operator.

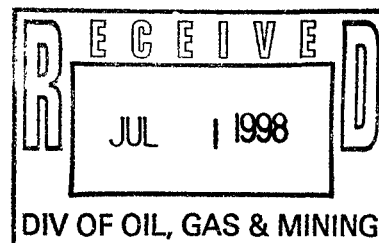
COASTAL OIL & GAS CORPORATION, Unit Operator

By: C. E. Lindberg

C. E. Lindberg, Vice President

Date: October 27, 1997

156747  
APPROVED - EFFECTIVE DEC 04 1997



**EXHIBIT "A"**

Attached to and made a part of that certain Designation of Agent dated October 27, 1997, 1997, from Coastal Oil & Gas Corporation to Enron Oil & Gas Company.

WELL NAME	LOCATION			
	DIV	SEC	TWP	RGE
NBU 386-24E	SESW	24	9S	21E
<del>NBU 401-0E</del>	<del>SESE</del>	<del>5</del>	<del>9S</del>	<del>21E</del>
NBU 483-19E	NESW	19	9S	21E
NBU 382-18E	NWSE	18	9S	21E
NBU 394-13E	SESW	13	10S	20E
NBU 431-9E	SWNW	9	10S	21E
NBU 391-5E	SWSE	5	10S	21E
NBU 341-29E	SESE	29	9S	22E
NBU 388-19E	SESW	19	9S	22E
NBU 393-13E	NWSE	13	10S	20E
<del>** NBU 379-2E</del>	<del>NWSW</del>	<del>2</del>	<del>9S</del>	<del>21E</del>
NBU 491-3E	SESW	3	9S	21E
NBU 496-10E	NESW	10	9S	21E
NBU 409-17E	SENE	17	9S	21E
NBU 484-20E	NWNW	20	9S	21E
NBU 489-7E	SWSW	7	9S	21E
NBU 492-7E	NWNW	7	9S	21E
NBU 322-15E	SESE	15	9S	20E
NBU 497-1E	NESE	1	10S	20E
NBU 344-12E	NWNE	12	10S	20E
NBU 390-4E	NESW	4	10S	21E
NBU 392-6E	NESE	6	10S	21E
NBU 486-7E	NESW	7	10S	21E
NBU 487-8E	NESE	8	10S	21E
NBU 448-20E	NWSW	20	9S	22E
NBU 488-20E	SWSE	20	9S	22E
NBU 389-29E	NWSE	29	9S	22E
NBU 456-2E	NWNW	2	10S	22E
NBU 485-36E	NWNE	36	9S	22E
NBU 451-1E	NESW	1	10S	22E
NBU 494-12E	SWSW	12	9S	21E
NBU 493-13E	SESE	13	9S	20E

\*\* Not to be drilled within 500' of unit boundary without prior approval of the BLM.

**EXHIBIT "A"**  
(continued)

WELL NAME	LOCATION			
	DIV	SEC	TWP	RGE
NBU 506-23E	NENW	23	9S	20E
NBU 499-15E	NESE	15	9S	20E
NBU 498-13E	NESE	13	10S	20E
NBU 384-23E	SESE	23	9S	21E
NBU 385-24E	NWSW	24	9S	21E
NBU 387-24E	SWNW	24	9S	21E
NBU 380-7E	SENW	7	9S	21E
NBU 383-23E	NENE	23	9S	21E
NBU 490-30E	NESW	30	9S	21E
NBU 495-31E	SESW	31	9S	21E
NBU 319-17E	NWNW	17	10S	21E
NBU 482-11E	NWSE	11	9S	21E
NBU 501-12E	SESE	12	9S	20E
NBU 500-19E	SESW	19	9S	21E
NBU 440-1E	NWSE	1	10S	20E
NBU 507-7E	SESW	7	10S	21E

All Township and Range references are South and East of the Salt Lake Meridian in Uintah County, Utah.

15074T

## FAX COVER SHEET

FROM: ED TROTTER

FAX NO. 435-789-1420

TELEPHONE NO. 435-789-4120

TO: UDOG & M

FAX NO. 801-359-3940

ATTENTION: LISHA CORDOVA

DATE: 7-1-1998

TOTAL NUMBER OF PAGES INCLUDING COVER PAGE: 4

All information contained in this facsimile is confidential and is solely directed to the above named recipient. If you receive this fax in error, or there is a problem with the transmission, please call: 1-435-789-4120. Thank you.

Lisha,

Designation of Operator for the five Enron Oil & Gas Company wells.

Thank you.



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

Michael O. Leavitt  
Governor

Lowell P. Braxton  
Division Director

July 9, 1998

Enron Oil & Gas Company  
P.O. Box 1815  
Vernal, Utah 84078

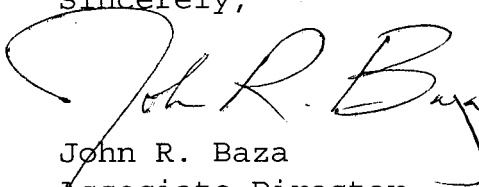
Re: NBU 451-1E Well, 1965' FSL, 2132' FWL, NE SW,  
Sec. 1, T. 10 S., R. 22 E., Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33142.

Sincerely,



John R. Baza  
Associate Director

lwp

Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal District Office



Operator: Enron Oil & Gas Company  
Well Name & Number: NBU 451-1E  
API Number: 43-047-33142  
Lease: U-010953  
Location: NE SW Sec. 1 T. 10 S. R. 22 E.

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours prior to spudding the well. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supercede the required federal approval which must be obtained prior to drilling.

5. In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rule R649-3-31 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the 4½" casing is cemented over the entire oil shale section as defined by Rule R649-3-31 (approximately 3,230' to 3,336' G.L.).

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

ENRON OIL &amp; GAS COMPANY

## 3. ADDRESS AND TELEPHONE NO.

P.O. BOX 1815, VERNAL, UTAH 84078

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1965' FSL &amp; 2132' FWL NE/SW

At proposed prod. zone

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

24.05 MILES SOUTHEAST OF OURAY, UTAH

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drilg. unit line, if any)

1965'

## 16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

80

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

7130'

## 20. ROTARY OR CABLE TOOLS

ROTARY

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5092' GRADED GROUND

## 22. APPROX. DATE WORK WILL START\*

AUGUST 1998

## 23.

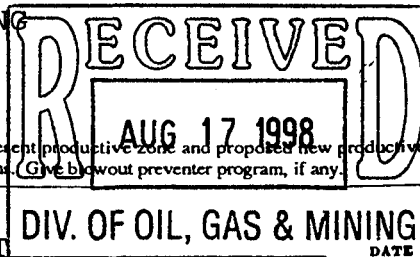
## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	24#	200-220'	100-150 SX CLASS "G" + 2%
OR 12 1/4"	9 5/8"	32.30#	200-220'	CaCl <sub>2</sub> + 1/4 #/SX CELLOFLAKE.
7 7/8"	4 1/2"	10.50#	7130'	50/50 POZMIX + 2% GEL + 10% SALT TO 400' ABOVE ALL ZONES OF INTEREST (+10% EXCESS). LIGHT CEMENT (11 PPG+) + LCM TO 200' ABOVE OIL SHALE OR FRESH WATER INTERVALS (+ 5% EXCESS).

SEE ATTACHMENTS FOR:

8 POINT PLAN  
BOP SCHEMATIC  
SURFACE USE AND OPERATING PLAN  
LOCATION PLAT  
LOCATION LAYOUT  
TOPOGRAPHIC MAPS "A", "B", AND "C"  
GAS SALES PIPELINE--MAP "D"  
FACILITY DIAGRAM,ENRON OIL & GAS COMPANY WILL BE THE  
DESIGNATED OPERATOR OF THE SUBJECT  
WELL UNDER NATIONWIDE BOND #81307603

pc: UTAH DIVISION OF OIL, GAS, AND MINING



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. (Give blowout preventer program, if any.)

## 24.

SIGNED

TITLE AGENT

DIV. OF OIL, GAS &amp; MINING

DATE

6-18-1998

(This space for Federal or State office use)

PERMIT NO.

NOTICE OF APPROVAL CONDITIONS OF APPROVAL ATTACHED

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

Assistant Field Manager  
Mineral Resources

DATE

8-4-98

\*See Instructions On Reverse Side

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Enron Oil & Gas Company

Well Name & Number: NBU 451-1E

API Number: 43-047-33142

Lease Number: U - 010953

Location: NESW Sec. 01 T.10S R. 22E

Agreement: Natural Buttes Unit

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

## CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

### A. DRILLING PROGRAM

#### 1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### 2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a **3M** system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

#### 3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany oil shale, identified at 1,955 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to the top of the cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-5(d) shall be submitted to the appropriate Field Office within 60 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (1).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries and tested for meter accuracy at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman (435) 789-7077  
Petroleum Engineer

Wayne P. Bankert (435) 789-4170  
Petroleum Engineer

Jerry Kenzcka (435) 781-1190  
Petroleum Engineer

BLM FAX Machine (435) 781-4410



## EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

**SURFACE USE PROGRAM**

The road should be crowned at between 2 to 3 %.

When plowing snow during the winter months, the snow should be plowed outside of the burrow ditches to prevent the snow melt from saturating the road during the spring.

The recommended seed mix to be used for topsoil, pit reclamation, and final reclamation will be:

Black sage	Artemesia arbuscula v. nova	3 lbs/ac
Fourwing saltbush	Atriplex canescens	4 lbs/ac
Western wheatgrass	Agropyron smithii	2 lbs/ac
Shadscale	Atriplex conferifolia	3 lbs/ac

All poundages are in Pure Live Seed.

A separate pile of subsoil which can be used to construct tank dikes shall be left near where the access road enters the location



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Vernal Field Office

170 South 500 East

Vernal, Utah 84078-2799

<http://www.blm.gov/utah/vernal>

Phone: (435) 781-4400

Fax: (435) 781-4410

IN REPLY REFER TO:

3160

UT08300

Sept. 9  
~~May 27~~, 1999

Enron Oil & Gas Company  
P O Box 250  
Big Piney, WY 83113

Re: Notification of Expiration  
Well No. NBU 451-1E  
NESW Sec. 1, T10S, R22E  
Lease No. U-010953

43-047-33142

Gentlemen:

The Application for Permit to Drill the above-referenced well was approved on August 4, 1998. Since that date, no known activity has transpired at the approved location. Applications for Permit to Drill are effective for a period of one year. In view of the foregoing, this office is notifying you the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

According to our records, the location has been constructed for this drill site. All surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

*Margie Herrmann*

Margie Herrmann  
Legal Instruments Examiner

cc: State Div. OG&M  
Enron Oil & Gas Co. - Vernal  
Ed Trotter

DOG-M  
LA  
DATE

